

## **Abstract**

The present invention is generally directed to a process for hot embossing a base sheet and/or to a process for perforating and bonding multiple plies of a paper product together. The process can be used in order to apply a decorative pattern to a paper product and/or to bond multiple ply products together. In one embodiment, the process of the present invention includes feeding a previously formed single ply or multi-ply base sheet through a heated embossing nip. As the base sheet passes through the heated embossing nip, sufficient heat and pressure is imparted to cause the fibers within the sheet to begin to melt or glassinate. Upon cooling, inter-fiber bonding occurs resulting in a well-defined embossment as well as bonding between plies of a multi-ply product.